

Review Paper

Classification of Costs in Strategic Management Accounting at Agricultural Enterprises

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Received: 21-12-2022

Revised: 24-03-2023

Accepted: 29-04-2023

ABSTRACT

The existing need to develop the main aspects of strategic management accounting systems in agricultural enterprises determines the relevance of the research. The goal of the research is to reveal theoretical aspects of cost classification and determination of strategic management accounting evaluation for agricultural production effective management. The subject of the research is the main theoretical, methodological, and practical provisions of agricultural production accounting and analysis. In the process of research, a set of special and general research method groups was used, namely: theoretical generalization, dialectical, grouping, analysis, abstraction, methods of cluster analysis, statistical methods, synthesis. The theoretical basis of the conducted research was the main conclusions and basic recommendations presented and substantiated by the research of scientists in the field of cost classification in strategic management accounting in agricultural enterprises. In the course of the research, it was determined that the main elements of cost classification in strategic management accounting in agricultural enterprises are costs in crop production, including pricing of products, production reporting, budget planning system, analysis, and implementation of control in the production of agricultural products. The results and substantiated conclusions contribute to the development of a theoretical and methodological basis for agricultural enterprises, information support, can be used in the development of documents that regulate issues related to the organization of accounting and analytical processes, as well as in the practice of agricultural enterprises, ministries, and departments of the republic.

HIGHLIGHTS

- The article aims to investigate the theoretical aspects of cost classification and strategic management accounting evaluation in agricultural enterprises, utilizing a range of research methods to analyze the main elements of cost classification and provide practical recommendations for information support and organizational processes in the agricultural sector.

Keywords: Calculation, Economy, Production, Spending Management

The Republic of Tajikistan is an agrarian country, and agriculture is a fundamental branch of the national economy. Ensuring high income from the production and sale of agricultural products requires a flexible system of regulating the factors that determine it. Therefore, the costs invested based on the cost of production need a detailed analysis. Costs are the starting point of the economic thinking of any economic unit. They are an economic category, which is created in the process of carrying out activities. The different types of costs

and methods and their calculation constitute cost accounting systems, which are the basic elements of management accounting (Sogunro, 2002). Changes in the operating conditions of agricultural activities cause the need to improve management. One of the important aspects of any business is the effective use of a variety of resources: material, financial,

How to cite this article: Khushvakhtzoda, K. (2023). Classification of Costs in Strategic Management Accounting at Agricultural Enterprises.. *Econ. Aff.*, 68(Special Issue): 781-787.

Source of Support: None; **Conflict of Interest:** None



personal, and intangible to improve the results achieved and increase the value of the enterprise. Improving the efficiency of resource use requires their appropriate allocation between different areas of activity and the application of the right way to use them, and therefore the right way to manage them.

The distinction of planning within the management process is widely discussed in the literature. Specifically, the concept of planning and management includes all stages from goal-setting to decision-making (planning in the broader sense). According to Polish, Tajik and Vietnamese authors, agricultural accounting used in enterprises forms the basis of both operational and strategic management (Symons, 1967; Ho, 2018; Vu *et al.* 2022). Following M. Dobija (2008) the main purpose of management accounting is to provide the management of the organization with the whole aspect of information data on the functioning of the enterprise to enable them to make management decisions, which in turn will be economically weighted. S.F. Nizomov and A. Kh. Faizulloev (2020) state that the subject of management accounting is information support associated with management decision-making, as well as the development of short-term cost management strategies and benefits from the activities of the enterprise. X. Nanyun and Y. Xu (2021) consider accounting as an important management tool, which is influenced by the factors of the economic environment, so it must adapt to the new conditions and give impetus to the economy. The budget is not only a tool of control but also a way to increase the value of the enterprise through the use of existing resources.

The research aims to disclose the theoretical aspects of cost classification and determine the evaluation of strategic management accounting to effectively manage the production of agricultural products. Thus, based on the above-mentioned goal, the following objectives were set: define the theoretical aspects of the management accounting concept and its significance; identify the possible impact of agricultural production on management accounting; to analyze the current state of the accounting organization at agricultural production companies.

MATERIALS AND METHODS

The theoretical basis of the conducted research was based on the main conceptual provisions,

recommendations, and conclusions presented and substantiated in fundamental and applied research of Tajik scientists in the field of strategic management accounting in agricultural enterprises, as well as the works of leading scientists in the field of economic development and strategic management, in particular in agricultural production of the Republic of Tajikistan. The economic system of approaches to the study of the subject of research is the methodological basis of the research. The comparison method was also used in the research (in the study of the concepts of strategic cost management). The inductive method was used at the stage of observation of agricultural operations, measurement and collection, registration and registration, systematization and processing of information for research, and the deductive method was used in the process of theoretical understanding of the problem. The information base of the research consists of official materials and publications of the commissions of the United Nations, Food and Agriculture Organization of the United Nations (FAOSTAT) (2022), as well as monographic and periodical literature, the results of this research. The materials were analyzed using comparison and the method of grouping, as well as the abstract-logical method, which was aimed at studying the classification of costs in strategic management accounting in agricultural enterprises of the Republic of Tajikistan.

During the research, the theoretical ways of scientific research and general scientific methods of knowledge were used. They are abstract and generalized. They enabled to systemize of the factual material. To study the classification of costs in strategic management accounting in the agricultural enterprises of the Republic of Tajikistan, a review of the regulatory framework; collection, and processing of statistical data (FAOSTAT, 2022) were conducted. The data of the GDP gross domestic product, agricultural production, total grain production, and the area under agricultural land are also considered. Moreover, the method of logical observation, as well as the abstract-logical method of approach to the study of cost management in agricultural production of the Republic of Tajikistan was used in the research. The method of generalization was used to summarize the results of the work. Following the results of the study, conclusions were obtained

on topical issues related to the classification of costs in strategic management accounting in the agricultural enterprises of the Republic of Tajikistan, in particular, the interdependence of costs on the specialization of enterprises was determined.

RESULTS AND DISCUSSION

Farming is one of the oldest branches of material production in which the products of agriculture are produced by growing and breeding plants. It is a very dependent activity on natural factors. But on the other hand, the agronomist can control biological processes and use the surface of the land to produce food (Skarżyńska *et al.* 2008). Throughout history, as the economic world has developed, agricultural production systems and methods have changed. However, agricultural and food development issues are still invariably of interest to the general public on the world stage. They are related to agriculture, namely the global goal of feeding the population (providing the consumer with food of good quality at relatively low prices). The agricultural sector in the economy of the Republic of Tajikistan is dominant, so currently, the welfare of the country’s population depends to a greater extent on the state and efficiency of economic entities in this sector.

Official statistics confirm this (FAOSTAT, 2022). The fact that the GDP of the Republic of Tajikistan has recently been a determinant and there has been some downward trend in it, with an annual increase in agricultural production (Table 1).

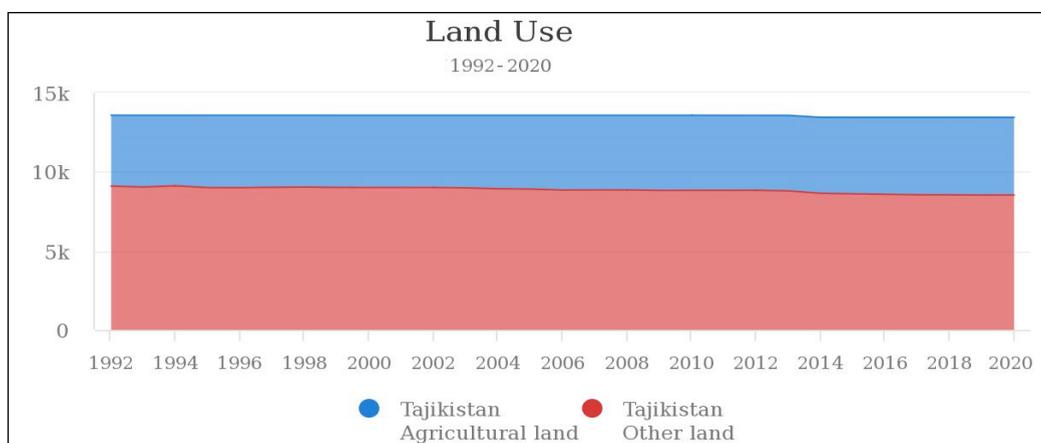
It is also important to note the trend of a steady increase in the area of agricultural land (Fig. 1) and the volume of grain crops produced in the country (Fig. 2), which gives reason to consider agriculture as a developing sector of the economy of the Republic of Tajikistan.

To perform effective production activities in agriculture, it is necessary to create a proper system of management and methodological support. Such a management system for agricultural enterprises can contribute to a significant increase in agricultural production and strengthen the food security of the country. To meet these challenges, the development and application of new and improved approaches to the organization of production and management of production stocks in agricultural enterprises are required (Zhang *et al.* 2020; Fuertes *et al.* 2020). In modern conditions, the effective management of agricultural organization production activities largely depends on the information support of the management system (Nguyen and Nguyen, 2021).

Table 1: Main macroeconomics metrics in the Republic of Tajikistan (in % to the previous year)

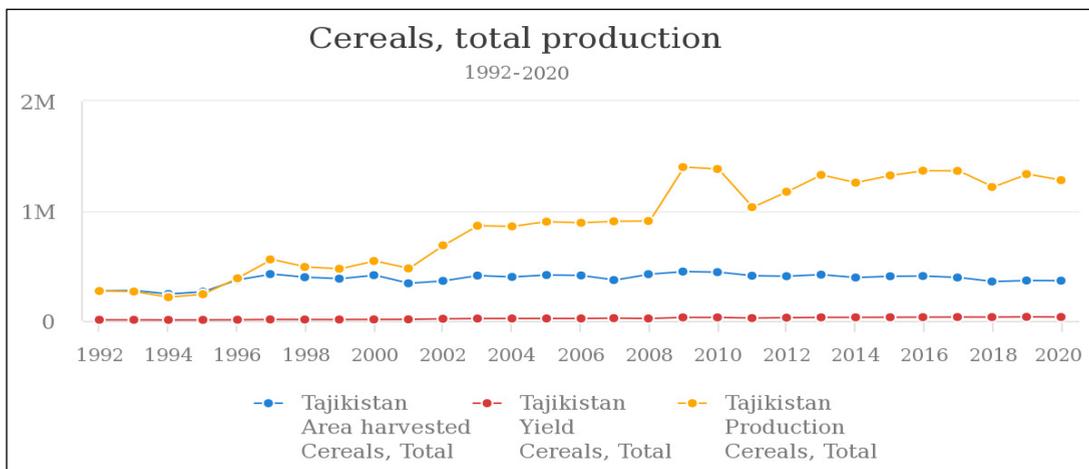
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Agricultural production	107	108	110	108	105	103.2	105.2	106.8	104.0	107.1	108.8
GDP	106.5	107.4	107.5	107.4	106.7	106.0	106.9	107.1	107.6	107.4	104.5

Source: FAOSTAT (2022).



Source: FAOSTAT (2022).

Fig. 1: Sizes of agricultural lands



Source: FAOSTAT (2022).

Fig. 2: Overall grain production in the Republic of Tajikistan

To increase the efficiency of agricultural production, planning, forecasting, accounting and analytical issues of management should be resolved by using a unified technology of justification and management decision-making. Such technology in agricultural enterprises is achieved by using the information subsystem as part of the production management system.

Traditional accounting documents the results of facts and phenomena of economic activity generalizes them and based on this generalization creates statements, available to users. At the same time, it uses only historical facts and phenomena that occurred in the past. As a consequence, users are not able to make estimations of future agricultural organization production activity with the necessary degree of reliability, based on traditional accounting information. Thus, the management accounting system of agricultural enterprises in the Republic of Tajikistan lacks methodological and technical aspects of accounting and its use in the management of agricultural production. The content of the current accounting system of agricultural organizations is relatively suitable for assessing the economic condition of the whole enterprise, but not for carrying out an analytical evaluation of the activities of structural parts of the enterprise (brigades, workshops, farms), technological processes, the production efficiency of certain types of crops and animals (Rehman *et al.* 2019). It is also important to note that there may be some limitations that enterprises face in determining

expenses, but it is also important to consider the factor of possible vectors of development, which will help to make accurate adaptation decisions (Table 2).

So, for example, it is especially important to focus on the perspective of future accounting and management when supporting the strategic planning process. The system of agricultural accounting differentiates between traditional and modern accounting. The first is associated with operational management, the aim of which is to maximize the profit of the enterprise in the short term. Currently, as a rule, it has an auxiliary role concerning the widely used modern accounting. On the other hand, modern accounting, also known as strategic, refers to strategic management, and its goal is to increase the value of the enterprise in the long term and maintain its competitiveness (Suárez Amaya *et al.* 2020).

Modern expense accounting systems include: activity expense accounting; aim cost; constant improving expense accounting; the life cycle cost of the product. Furthermore, some features of the classification in agricultural enterprises are highlighted. It concerns the grouping of expenses depending on the volume of production as it does not depend on the performance of technological operations, but on the area of crops or the number of livestock, crop yields, and productivity. As such, in agricultural enterprises, there are fixed expenses on production, which do not change under any circumstances, conditionally variable, which are

Table 2: Restrictions of traditional expense accounting

No.	Restrictions	Development direction
1	Compliance with financial accounting requirements	Adaptation to the needs of management accounting
2	Measuring short-term value	Measuring the value of a strategic object for management purposes
3	Product stocks, as well as determining the financial result	Supporting the strategic planning process
4	The employment of relevant metrics in assessing business performance	Inclusion of non-financial indicators in business performance evaluation
5	Based on assumptions of production processes	Expanding customer opportunities, improving competitiveness
6	Preparation of periodic financial statements as a source of cost information	Preparation of periodic reports for future decision-making purposes
7	Product cost calculation	Expanding the calculation of expenses in the system of measures
8	Accounting for indirect expenses under the simplified procedure	Accurate calculation of indirect expenses
9	Retrospective approach to determining expenses	Estimation of future expenses

Source: N.B. Chursingova (2019).

determined by the sown area or livestock, and variable, which is determined in total by the amount of obtained products. Accounting in agriculture must consider the structural features of the organization and its specialization, and it is important that the management accounting itself was aimed at the needs of information management and provided expense control by the objects of accounting: crops – in crop production; livestock – groups (types) of animals, as well as for analysis, evaluation, and planning of directions of development of the economic activity of the agricultural enterprise. Since the organization of management accounting is influenced by organizational features of crop and animal growing technologies (natural and climatic conditions, land use, duration of operating technologies, seasonality of production, and type of products produced), decision-making in strategic management accounting at agricultural enterprises needs reliable information on the objects of management.

Agriculture has always been the most important part of the economy since ancient times when working the land, animal husbandry, and then selling the resulting agricultural products were the main forms of earning income for people. Nowadays, agriculture is conducted on an intensive level, taking advantage of technological progress that facilitates physical labor, but at the same time

is associated with a different level of expenses. The main reasons for the inefficient operation of agricultural organizations are the lack of an effective system for managing their activities. It is important to note that the development of agricultural activity is based on living plants and animals undergoing specific biophysiochemical transformations that determine the creation of new organic matter by biological means. As far as the production process is concerned, the production cycle proceeds over a longer period than in other areas, which is necessary for organisms to undergo appropriate transformations. During this time, the expenses on preparing and sustaining the production process are gradually incurred, materializing at the end of the production cycle in the resulting agricultural products. The consumption of resources in the process of agricultural production is determined by the concept of production expense. It is determined by summing up all the expenses associated with the production activities in all stages of production of the relevant product.

The issue of expense classification in strategic management accounting in agricultural organizations has been constantly researched by English and Tajik scientists. Thus, K. Simmonds (1981) considers expense accounting in management accounting as a separate information subsystem in the information system of the subject, in which

information about expenses is processed following the model adopted in the subject. The data the information on the incurred expenses are supposed to be used for an estimation of the position of the enterprise, acceptance of the corresponding decisions, and control over the performance of these decisions. The conducted study correlates with the opinion of many authors and scientists in the field of expense classification in strategic management accounting in agricultural organizations. Thus, D.M. Akbasheva *et al.* (2020) define expense accounting as the main element of economic decisions. Following O. Yu. Frantsisko *et al.* (2020), the essence of accounting is to measure and evaluate the expenses associated with the use of resources and services. As a result of the consumption of available factors of production, they turn into goods or services. The next step is the presentation of expenses, grouped into different categories. Its ultimate goal is to interpret, analyze and use the expenses resulting from the current decision-making process. Expense accounting is related to both financial and managerial accounting since it makes it possible to determine expenses in various cross-sections. The expense information available from it can serve as the basis for rationalizing the economic decisions made by the management of an enterprise. This basis is realized within the framework of a comprehensively understood management accounting, especially in connection with the decision-making process. Under its connection with procedures for valuing, in particular, tangible current assets, expense accounting also qualifies as accounting. Moreover, according to L. Goraj *et al.* (2010), expense accounting performs important functions in the enterprise, which include the following: information, planning and optimization, motivation, and control. Statistics on the expenses and financing of agriculture imply a comprehensive understanding of production. Operating expenses in agricultural enterprises are grouped by economic elements: labor expenses; financial expenses; expenses related to social activities; and other operating expenses (Umadia and Kasztelnik, 2020). The analysis of the literature on management accounting shows that a particularly important aspect of any organization is the knowledge of the required expenses needed to carry out the activities. To provide this information managerial accounting

is organized as support in justification of decisions on commercial policy. To know the expenses of production in the agricultural sphere, all costs must be assigned to expense centers. The importance of knowing the production expense is determined by the direct connection between the production expense and profitability. A higher expense level dictates a sales price to cover the expense incurred, and in a free competitive environment, expense reduction ensures the profitability of operations.

CONCLUSION

The agricultural sector in the Republic of Tajikistan is important in providing the population with food. The profitability of agriculture is low, so achieving the goals set for this sector of the economy requires assistance and support. Due to the organic nature of production, the close connection of the production process, and the fact that production largely depends on weather conditions, the calculation of expenses in agricultural activities is more difficult than in non-agricultural ones. During the research, it was established that the main elements of expense classification in the strategic management accounting in agricultural enterprises are expenses in crop production, including pricing of products, reporting production, budget planning system, analysis, and control in the production of agricultural products. Expense calculation involves the collection of expenses using consistent methods and procedures in expense structures necessary to justify decisions at the enterprise management level. Current expense accounting systems include activity-based costing, target costing, continuous improvement costing, and product life-cycle cost.

Furthermore, some features of the classification in agricultural enterprises are highlighted. It concerns the grouping of expenses depending on the volume of production as it does not depend on the performance of technological operations, but on the area of crops or the number of livestock, crop yields, and livestock productivity. For the farms themselves, knowledge of expenses and their calculation is useful in making both strategic and operational decisions. The efficiency of agricultural production depends on the implementation of measures to improve expense accounting and output control. The same applies to additional expenses for current business, which requires

knowledge of possible incurred expenses. Further research on this issue should be aimed at the development of scientific and applied development of provisions and recommendations to improve the management accounting methodology in agricultural organizations.

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